

SHAGALOVA, S.L., kand.tekhn.nauk; REZNIK, V.A., inzh.

Explosion of natural fuel dusts in ventilated units. Teploenergetika  
9 no.2:25-29 F '62. (MIRA 15:2)

1. TSentral'nyy kotloturbinnyy institut.  
(Dust explosions) (Furnaces--Safety appliances)

SHAGALOVA, S.L., kand.tekhn.nauk; REZNIK, V.A., inzh.

Design of the cross section of safety valves in connection with  
dust explosions. Teploenergetika 9 no.3:41-45 Mr '62.

(MIRA 15:2)

1. TSentral'nyy kotloturbinnyy institut.  
(Furnaces--Safety appliances) (Coal, Pulverized)

SHAGALOVA, S.L., kand.tekhn.nauk; REZNIK, V.A., inzh.

Escape of gases through pipelines as a result of dust explosions.  
Teploenergetika 9 no.12:19-21 D '62. (MIRA 16:1)

1. TSentral'nyy kotloturbinnyy institut.  
(Electric power plants) (Furnaces)

S/096/63/000/002/001/013  
E194/E455

AUTHORS: Shagalova, S.L., Candidate of Technical Sciences,  
Timoshin, Yu.A., Reznik, V.A., Shnitser, I.N., Engineers

TITLE: An experimental study of the process of combustion of  
anthracite dust in the furnaces of large steam boilers

PERIODICAL: Teploenergetika, no.2, 1965, 2-9

TEXT: The combustion of anthracite dust was studied in the following boilers: type ТΠ-70 (TP-70) of 430 tons per hour with 12 combined pulverized-fuel/gas burners based on the ORGRES turbulent dust burner; type ТΠ-230-2 (TP-230-2) of 230 tons per hour with 6 round turbulent Babcock-TKZ burners and type ТΠ-230-Б (TP-230-B) of 230 tons per hour with 8 direct-flow pulverized fuel burners. A study was first made of the distribution of gas, fuel and temperature in the flames and the procedure is described. Considerable unevenness was found in the distribution of fuel and air between burners in boilers TP-230-2 and TP-70; it was corrected by dampers before the main tests were started. The influence of the following factors on the rate of combustion of anthracite dust was then studied; the excess-air factor, the primary and secondary air speeds and the primary/secondary air ratio.

Card 1/3

S/096/63/000/002/001/013

E194/E455

An experimental study ...

the fineness of milling of the fuels and the thermal loading of the furnace space. Extensive measurements were made of changes in gas composition, fuel content and temperature over the flame length. The performance of the various burners is discussed. The general conclusions concerning the combustion of anthracite dust with a range of particle sizes in direct flow flames are that the fine particles are burnt in the first part of the flame, 90% of the fuel being burned in about a quarter of the total combustion time, the latter part of which is taken up by incomplete combustion of large particles, which constitutes much of the unburned fuel loss. Where the fuel is burning very rapidly the oxygen concentration in the flame drops to 2 - 4%. The rating of screened single-chamber furnaces of the type described can be raised to  $200 \times 10^3$  kcal/m<sup>3</sup>h with an unburned fuel loss of 3%, but to achieve this rate the furnace gas discharge temperature must be raised and slagging may be experienced, so that the factor which limits the thermal loading is the heat-exchange rate. To increase furnace loadings the combustion conditions should be such that large particles are readily burned, as in cyclone or vortex type furnaces. There are

Card 2/3

An experimental study ...

7 figures and 2 tables.

ASSOCIATION: Tsentral'nyy kotloturbinnyy institut  
(Central Boiler and Turbine Institute)

S/096/63/000/002/001/013  
E194/E455

Card 3/3

SHAGALOVA, S.L., kand.tekhn.nauk; TIMOSHIN, Yu.A., inzh.; REZNIK, V.A., inzh.;  
SHNITSER, I.N., inzh.

Experimental study of the combustion of pulverized anthracite culm in  
the furnaces of large steam boilers. Teploenergetika 10:2-9 F 163.  
(MIRA 16:2)

1. TSentral'nyy kotloturbinnyy institut.  
(Boilers) (Anthracite coal)

"APPROVED FOR RELEASE: 07/20/2001

CIA-RDP86-00513R001548520012-3

SHAGALOVA, S.L., kand.tekhn.nauk; TIMOSHIN, Yu.A., inzh.; SHNITSER, I.N., inzh.

Effect of the uneven distribution of dust and air in burners on  
the magnitude of mechanical incomplete combustion of anthracite culm.  
Energomashinostroenie 10 no.1:22-25 Ja '64. (MIRA 17:4)

APPROVED FOR RELEASE: 07/20/2001

CIA-RDP86-00513R001548520012-3"

SHAGALOVA, S.L., kand. tekhn. nauk; GUSEV, L.N., inzh.; SHNITSER, I.N., inzh.

Study of the combustion of anthracite culm in the combustion chamber of  
the TP-90 boiler with continuous flow-type long-slotted burners. Teplo-  
energetika 11 no.8:36-41 Ag '64. (MIRA 18:7)

1. TSentral'nyy kotloturbinnyy institut.

L 57502-65 EWT(1)/EWP(m)/EWA(d)/FGS(k)/EWA(l) Pd-1  
ACCESSION NR: AP5013999 UR/0096/65/000/006/0027/0032  
683.87.001.5 25

AUTHORS: Shagalova, S. L. (Candidate of technical sciences); Shnitser, I. N. 27  
(Engineer); Gromov, G. V. (Engineer) 15

TITLE: Investigation of the aerodynamic flow characteristics produced by a burner  
with vane deflectors /

SOURCE: Teploenergetika, no. 6, 1965, 27-32

TOPIC TAGS: powdered fuel, fuel burner, fuel injector, furnace burner/ UT 11 2 10  
burner \0

ABSTRACT: The experiments with powdered fuel burner UT-11-2 (capacity 5 t/hr, used  
on boilers with capacity 640 t/hr) presented previously by S. L. Shagalova, I. N.  
Shnitser, and G. V. Gromov ("Teploenergetika" No. 3, 1965) were continued by deter-  
mining the aerodynamic characteristics of the flow in a 1:4 scale model (see Fig. 1  
on the Enclosure). Flow irregularity, change of velocity along the flame axis,  
swirl in the flow, angle enclosed by flame, size of recirculating regions, and  
amount of recirculation were measured. A comparison with other types of burners was  
also performed. It was found that in the range of speeds  $w_2/w_1$  from 1.0 to 1.8 with

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L 57502-65  
ACCESSION NR: AP5013999

with  $w_1 = 20$  m/sec the flame had a compact flow character with substantial discharge in the center region; the length of the recirculation zone was 2.0-2.5 d (d = outside diameter of pot); angle enclosing flame was below 40-44°. At lower  $w_2/w_1$  the angle increased but the flow irregularity (ratio between maximum and minimum velocity at a point and the average calculated flow velocity) was also increased. Maximum dimensionless axial velocities decreased with increasing  $w_2/w_1$  for  $x/d < 2-2.5$ , but were independent of  $w_2/w_1$  for  $x/d > 2.5$ . All parameters depended on whether the torch was operating with or without flow separation between the primary and secondary air supply. With flow separation, the length of the torch increased with a decrease in swirl. To control the position of the flame core, it was found advisable to change the distance between the primary and secondary air supplies. Comparison with other burners showed that the velocity change and length of flame penetration of the UT-11-2 are comparable to that of round double-helix burners, but that flame penetration is much lower than for Z10 burners with radial vanes. Most recirculation occurred in sections  $\approx 0.5$  d from the throat and comprised 9-10% of the total flow. Mixing of primary and secondary air supplies was found to be much better with separation between the flows than without. Since UT-11-2 offers comparable performance to double-helix burners (with a much lower hydraulic loss coefficient), these burners are recommended for industrial use. Orig. art. has:

Card 2/4

L 57502-65  
ACCESSION NR: AP5013999

7 figures, 2 tables, and 3 formulas.

ASSOCIATION: TeKTI; ZIO

SUBMITTED: 00

ENCL: 01

SUB CODE: PR, ME

NO REF Sov: 004

OTHER: 000

Card 3/4

L 57502-65  
ACCESSION NR: AP5013999

ENCLOSURE: 01

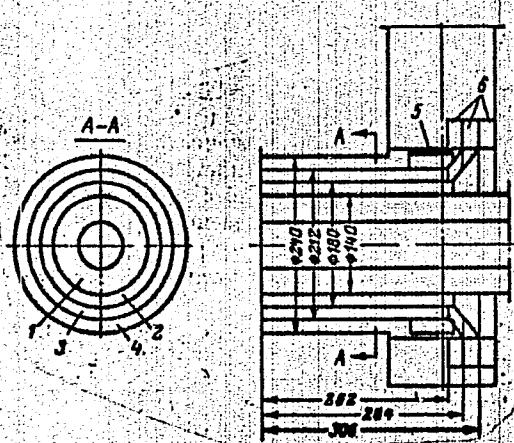


Fig. 1. Location of cylindrical channels in burner UT-11-2:  
1- primary channel; 2, 3, 4- inner, intermediate, and outer secondary  
channels respectively; 5- cylindrical throttle; 6- three-section vane  
assembly

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Card 4/4

PHAGALYAN, V. A., Tsvet. metal; SHCHEFER, I. M., Inzh. SUDOST, etc.

Characteristics of a flow in cylindrical channels behind the spiral and the blade mechanism. Tsplotergetika 12 no.3:  
7-11 Mr '65. (MIRA 18:6)

1. Mental'nyy nauchno-issledovatel'skiy kotloturbianyy institut  
im. I.I. Polzunova i Podol'skiy zavod imeni Ordzhonikidze.

KATSNEL'SON, B.D., kand. tekhn. nauk; KISEL'GOF, M.L., kand. tekhn. nauk;  
KLIMOV, I.I., kand. tekhn. nauk; SHAGALOVA, S.L., kand. tekhn. nauk;  
REZNIK, V.A., inzh.

Safety regulations for systems operating on pulverized fuel. Teploenergetika 12 no.4:90-93 Ap '65. (MIRA 18:5)

1. TSentral'nyy nauchno-issledovatel'skiy kotloturbinnyy institut  
im. I.I.Polzunova, i Vsesoyuznyy ordena Trudovogo Krashnogo Znameni  
teplotekhnicheskiy institut imeni Dzerzhinskogo.

L 05694-67

ACC NR: AP6019731

SOURCE CODE: UR/0096/66/000/007/0037/0041

AUTHOR: Shagalova, S. L. (Candidate of technical sciences); Reznik, V. A. (Candidate of technical sciences); Shnitser, I. N. (Engineer); Barbyshev, B. N. (Engineer)

ORG: TsKTI-TKZ

TITLE: Furnace aerodynamics and anthracite combustion during the operation of direct- and vortical-flow burners

SOURCE: Teploenergetika, no. 7, 1966, 37-41

TOPIC TAGS: aerodynamic design, coal, vortex flow, furnace, steam boiler, combustion kinetics

ABSTRACT: The authors study furnace dynamics and combustion kinetics of anthracite during the operation of direct- and vortical-flow burners. Results are given from a study on the aerodynamics of a burning jet. The firebox velocity fields of the TP-90 boiler operating with long-flame burners and TP-70 boilers operating on ORGRES-TsKTI vortical type short-flame burners are compared with the results of cold scavenging. Analysis of the data shows that qualitative calculations carried out with respect to cold burner scavenging cannot be applied to processes which occur during firebox burner operation. Burning jet data must be used for calculating the material and thermal balances at the initial part of the jet. This isothermal data can be used

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UDC: 683.87:621.18.001.5

L 05694-67

ACC NR: AP6019731

for determining burner resistance factors, improving the design of individual burner elements and for explaining the qualitative nature of gas flow in the furnace. Orig. art. has: 6 figures, 2 tables, 1 formula.

SUB CODE: 13.21 SUBM DATE: None/ ORIG REF: 002

rw  
Card 2/2

Country	USSR
Category	Microbiology. Microbes Pathogenic for Man and Animals. Mycobacteria.
Abs. Jour	Ref Zhar- iol., No 23, 1958, no 104914
Author	Zinskaya R. M., Sharalova S. Yu., Shmaliy K. V., Bashta A. S.
Instituti	Khar'kov Scientific Research Tuberculosis Institute
Title	Study of a New Peroral Method of Revaccination With Large Repeated Doses of BCG Vaccine in Uninfected Children
Orig Pub.	Oboz. nauchni. tr. Khar'kovsk. n.-i. in-t tuberkulëza, 1957, part I, 57-59
Abstract	No abstract.
Card!	1/1

SHAGALOVA, Yu.S., kandidat meditsinskikh nauk

Treatment of tuberculosis of the lymph nodes in children. Probl.  
tub. 34 no.2:39-41 Mr-Ap '56. (MLR 9:8)

1. Iz detskogo otdeleniya (rukoveditel' - kandidat meditsinskikh  
nauk R.M.Pinskaya) Nauchno-issledovatel'skogo instituta tuberkuleza  
v Khar'kove (dir. - dotsent N.M.Yanov)  
(TUBERCULOSIS, LYMPH NODE, in infant and child,  
ther. (Rus))

AFKULINOV, IU. I., SHAGAN, P. F.

Vascular System

Condition of the cardiovascular system in newborn in disorders of cerebral circulation.  
Vop. pediat. i okhr. mat. i det. 20 no. 2, '52.

Monthly List of Russian Accessions, Library of Congress, August 1952, UNCLASSIFIED.

"APPROVED FOR RELEASE: 07/20/2001

CIA-RDP86-00513R001548520012-3

Some problems in the physiology and pathology of newborn infants.

Some problems in the physiology and pathology of newborn infants. Moscow, 1953.  
114p. (Trudy Akademii meditsinskikh nauk SSSR, t. 89)

APPROVED FOR RELEASE: 07/20/2001

CIA-RDP86-00513R001548520012-3"

ARKUSSKIY, Yu.I.; SHAGAN, B.F.

State of the cardiovascular system in newborns in disturbances of cerebral  
blood circulation. Trudy A'N SSSR 29:76-81 '53. (MLRA 6:11)  
(Cardiovascular system) (Blood--Circulation) (Infants (Newborn))

SHAGAN, B.F.

Hemolytic anemia in newborns and methods of treating it. Trudy AMN SSSR 29:  
96-108 '53. (MLRA 6:11)

(Infants (Newborn)) (Anemias)

SHAGAN, B.F.

USSR/General Problems of Pathology - Tumors.

T-5

Abs Jour : Ref Zhur - Biol., No 4, 1958, 17436.

Author : Shagan, B.F.

Inst :

Title : On the So-Called Leukemia Reactions and Leukemias in Children.

Orig Pub : Sov. zdraavookhr. Kirgizii, 1956, 5, 14-18.

Abstract : No abstract.

Card 1/1

BEKKER, S.M.; YEVDOKIMOV, A.I.; KIRSHENBLAT, Ya.D.; KONSTANTINOV, V.I.;  
LEVI, M.F.; LUR'YE, A.Yu.; NIKOLAYEV, A.P., prof.; NOVOSEL'SKIY,  
V.A.; PANCHENKO, N.A.; SHAGAN, B.F.; SYRKIN, M.M., red.;  
GITSSTEYN, A.D., tekred.

[Practical obstetrics; selected chapters] Prakticheskoe akusherstvo;  
izbrannye glavy. Kiev, Gos.med.izd-vo USSR, 1958. 565 p.

(MIRA 12:2)

1. Deystvitel'nyy chlen Akademii meditsinskikh nauk SSSR (for  
Nikolayev).

(OBSTETRICS)

SHAGAN, Bentsion Fayvelevich

[Principles of knowledge about the newborn child] Osnovy  
ucheniia o novorozhdennom rebenke. Moskva, Medgiz, 1959.  
330 p. (MIRA 13:4)  
(INFANTS (NEWBORN))

SHAGAN, B.F., prof.

Urgent problems in the clinical hematology of childhood. Sov. zdrav. Kir. no.2:3-6 Mr-Ap '62. (MIRA 15:5)

1. Iz kafedry pediatrii (zav. - prof. B.F.Shagan) Kirgizskogo gosudarstvennogo meditsinskogo instituta.  
(HEMATOLOGY)

VOL'SKIY, Miron Yefimovich, zasl. deyatel' nauki Kirgizskoy SSR,  
doktor med. nauk, prof.[deceased]; SHAGAN, B.F., doktor med.  
nauk, prof., red.; MIRRAKIMOV, M.M., dots., red.; BEYSHENOV, A.,  
tekhn. red.

[Selected works] Izbrannye trudy. Frunze, Kirgizskoe gos. izd-  
vo, 1962. 257 p. (MIRA 15:11)

(VOL'SKII, MIRON EFINOVICH, 1891-1958) (MEDICINE)

SH.G.R., U.S., prof.

Some problems of the care and feeding of prematurely born and  
weak infants. Trudy Tazh. med. inst. 59:21-54 '61.  
(MIR, 17:3)

1. Povedyayushchiy knyegoy pediatrui Kirovskogo meditsinskogo  
Instituta.

SHAGAN, I. B.

PA 26/49T72

**USSR/Medicine - Smoke**

Medicine - Industry and Occupation,  
Hygiene

Jul 48

"Application of a Nephelometer for Determining the Concentration and Dimension of Smoke Particles in Industrial Areas," I. B. Shagan, Sec on Labor Hygiene, Aerosol Lab, Leningrad Sci Res Inst of Labor Hygiene and Occupational Diseases, 6½ pp

"Ug 1 San" No 7 p 25-27, 1, 1948

Discloses method using a nephelometer for determining concentration and the degree of

26/49T72

**USSR/Medicine - Smoke (Contd)**

Jul 48

dispersion of smoke particles in industrial areas. Method is based on diffusion of light, through the comparison of two photometric fields. Includes tables and graphs.

26/49T72

SHAGAN, I.B., kandidat meditsinskikh nauk

A device for taking air samples in the respiration zone of industrial workers. Gig. i san., 21 no.7:51-52 J1 '56. (MIRA 9:9)

1. Iz kafedry gigieny truda Leningradskogo sanitarno-gigiyenicheskogo instituta.

(AIR

sampling in indust., device)

(INDUSTRIAL HYGIENE

air sampling, device)

SHAGAN, Iosif Bentsianovich; BURLOVA, L.Ya., red.; KHARASH, G.A.,  
tekhn.red.

[Prevention of occupational diseases among metalworkers]  
Preduprezhdanie professional'nykh zabolеваний u rabochikh-  
metallistov. Leningrad, Gos.izd-vo med.lit-ry, Leningr.otd-nie,  
1959. 49 p. (MIRA 13:3)

(METALWORKERS--DISEASES AND HYGIENE)

SHAGAN, Iosif Borisovich; STOZHKOVA-GOL'DFARB, N.F., red.; SHEVCHENKO,  
F.Ya., tekhn.red.

[Industrial hygiene in the radio industry] Gigiena truda  
v radiotekhnicheskoi promyshlennosti. Leningrad, Gos.izd-vo  
med.lit-ry. Leningr. otd-nie, 1960. 51 p.

(MIRA 13:11)

(RADIO INDUSTRY--HYGIENIC ASPECTS)

"APPROVED FOR RELEASE: 07/20/2001

CIA-RDP86-00513R001548520012-3

SHAGAN, I.B.

Occupational hygienic characteristics in polishing rings for torsion  
machines. Gig.i san. 26 no.1:118-124 Ja '61. (MIRA 14:6)  
(VIBRATION--PHYSIOLOGICAL EFFECT)  
(GRINDING AND POLISHING--HYGIENIC ASPECTS)

APPROVED FOR RELEASE: 07/20/2001

CIA-RDP86-00513R001548520012-3"

GORBACHEVSKIY, Fedor Fedorovich; SHAGAN, Iosif Bentsionovich; SURLOVA, L.Ya., red.; KHARASH, G.A., tekhn. red.

[Prevention of occupational diseases in the operation of gas-using boiler rooms] Preduprezhdenie professional'nykh zabolеваний pri obsluzhivanii gasifitsirovannykh kotel'nykh. Leningrad, Medgiz, 1962. 57 p.  
(Boilers—Safety measures)

(MIRA 15:7)

"APPROVED FOR RELEASE: 07/20/2001

CIA-RDP86-00513R001548520012-3

KARPOV, Boris Dmitriyevich; KARPOVA, Nadezhda Ivanovna; SHAGAN, I.B.,  
red.; LEBEDEVA, G.T., tekhn. red.

[Work hygiene in the plastics industry (laminates)] Gigiena  
truda v proizvodstve plasticheskikh mass; sloistye plastiki.  
Leningrad, Medgiz, 1962. 30 p. (MIRA 15:9)  
(Plastics industry--Hygienic aspects)

APPROVED FOR RELEASE: 07/20/2001

CIA-RDP86-00513R001548520012-3"

SHAGAN, I.B.

Significance of electric charge in dust in the development  
of silicosis. Trudy LSGMI 75:181-191 '63. (MIRA 17:4)

1. Kafedra gigiyeny truda s klinikoy professional'nykh  
zabolevaniy (zav. kafedroy - prof. Ye.TS. Andreyeva- Galanina)  
Leningradskogo sanitarno-gigiyenicheskogo meditsinskogo in-  
stituta.

GOL'DMAN, Erien Isaakevich; SHAGAN, I.S., red.

[Work hygiene in the electron vacuum tube industry]

Gigiena truda v eleketrovakuumnoi promyshlennosti.

Leningrad, Meditsina, 1964. 208 p. (MIRA 18:2)

OSIFOV, Yuriy Aleksandrovich. Prinimal uchastiye KULIKOVSKAYA,  
Ye.L., inzh.; SHAGAN, I.E., red.

[Industrial hygiene and the effect of electromagnetic fields  
of radio frequencies on workers] Gigiena truda i vlianie na  
rabotatuzhikh elektromagnitnykh polei radiochastot. Le-  
ningrad, Meditsina, 1965. 219 p. (MIRA 18:5)

Shagan, I. R.

PHASE I BOOK EXPLOITATION

SOV/6150

Akademiya nauk Latviyskoy SSR. Institut eksperimental'noy meditsiny.

Voprosy kurortologii. [t.] 5: Problemy fiziologicheskogo deystviya i terapeuticheskogo primeneniya aeroionov (Problems in Health-Resort Therapy. v. 5: Studies of the Physiological Effect and Therapeutic Application of Air Ions). Riga, Izd-vo AN Latviyskoy SSR, 1959. 424 p. (Series: Its: Trudy, t. 20) Errata slip inserted. 1000 copies printed.

Sponsoring Agency: Akademiya nauk Latviyskoy SSR. Institut eksperimental'noy meditsiny.

Editorial Board: Resp. Ed.: L. L. Vasil'yev, Professor, P. D. Perli, Professor, F. G. Portnov, Candidate of Medical Sciences, Ya. Yu. Reynet, Candidate of Physical and Mathematical Sciences, and L. M. Tutkevich, Candidate of Medical Sciences; Ed.: A. Vengranovich; Tech. Ed.: A. Zhukovskaya.

Card 1/7

Problems in Health-Resort (Cont.)

SOV/6150

PURPOSE: This book is intended for physicians working at health resorts and for the general practitioner.

COVERAGE: This book, a collection of articles, is essentially the proceedings of the Second Conference on the Physiological Effect and Therapeutic Application of Air Ions, held at Riga (Latvian SSR) in December 1957. The use of negative air ions is believed to be beneficial in the treatment of nonhealing wounds and ulcers which often result from radiation injury. The book contains photos of numerous devices described in the text. Numerous references, mostly Soviet, are given at the end of some of the articles.

TABLE OF CONTENTS [Abridged]:

Gerke, P. Ya. Introduction 3

Vasil'yev, L. L. Current Problems of the Physiological and Therapeutic Effect of Air Ions 5

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## Problems in Health-Resort (Cont.)

SOV/6150

Shagan, I. B. Experimental Dust-Electro-ionizing Installation

61

Minkh, A. A. Climato-physiological Significance of Air Ionization.

63

Portnov, F. G., and A. P. Lantsere. Ionization of the Air Over the Riga Seacoast and the Influence of Air Baths Upon the Pressure Level and Vascular Tonus of Hyper- and Hypotonic Patients

79

Grachev, V. I. Determination of Lightweight Ions in the Vicinity of Mountain Rivers and Waterfalls in the El'brus Region

87

Pozdeyev, V. G. Natural and Artificial Conditions in Treatment With Ionized Air at Kislovodsk

97

Salmanova, M. I. Application of Air Ionization in Radium Therapy

109

Card 4/7

The Committee on Stalin Prizes (of the Council of Ministers USSR) in the fields of science and inventions announces that the following scientific works, popular scientific books, and textbooks have been submitted for competition for Stalin Prizes for the years 1952 and 1953. (Sovetskaya Kultura, Moscow, No. 22-40, 20 Feb - 3 Apr 1954)

Name	Title of Work	Nominated by
Golovkin, V.M.	"Development of the Technology of Manufacture of the Components of the Technology of Refrigeration and Cooling of Food Products"	Leningrad Institute of Refrigeration and Dairy Industry
Khafizov, D.D.	"The Technology of Refrigeration"	
Shkolnikova, N.P.	"The Technology of Refrigeration"	
Shchegoleva, M.V.	"The Technology of Refrigeration"	
Shchegoleva, O.S.	"The Technology of Refrigeration"	

SO: W-30604, 7 July 1954

GOLOVKIN, N.; CHIZHOV, G.; SHKOL'NIKOVA, E.; SHAGAN, O.

Defrosting meat in liquid media. Myasnaya Ind. S.S.S.R. 24, No.2,  
5-8 '53. (MIRA 6:4)  
(CA '47 no.15:7690 '53)

1. Leningrad Inst. Refrig. and Dairy Inds.

SHAGAN, O.S.

GOLOVKIN, N.A.; CHIZHOV, G.B.; SHKOL'NIKOVA, Ye.F.; SHAGAN, O.S.

Theory of the defrosting of meat. Trudy LTIKHP 5:64-68 '54.  
(Meat, Frozen) (MIRA 11:3)

[57]  
GOLOVKIN, N.; SHAGAN, O.; ALYAMOVSKIY, I.

Examination of the processes of meat cooling. Mias. ind. SSSR 25  
no.1:12-16 '54. (MLRA 7:3)

1. Leningradskiy institut kholodil'noy i molochnoy promyshlennosti.  
(Meat--Preservation)

SHAGAN, O.

USSR / Chemical Technology. Chemical Products and Their Application. Food Industry. I-30

Abs Jour : Ref Zhur - Khimiya, No 3, 1957, No 10412

Author : Golovin, N., Shagan, O., and Alimovskiy, I.

Inst : Not given

Title : Variations in the Natural Losses in Meat During Freezing

Orig Pub : Myasnaya industriya SSSR, 1955, No 6, 11-15

Abstract : The freezing of meats has been investigated and a method is proposed for determining the dehydration of the meat during freezing. On the basis of an analysis of the heat balance during freezing and the theory of controlled cooling rates, the authors conclude that the rate of dehydration of the meat during freezing follows an exponential law:

$$V = V_m e^{-mg\tau}$$

Card : 1/4

USSR / Chemical Technology. Chemical Products and Their Application. Food Industry. I-30

Abs Jour : Ref Zhur - Khimiya, No 3, 1957, No 10412

Abstract : where  $U$  is the rate of dehydration at any given instant during freezing in gms/hr,  $\tau$  is the freezing time in hours,  $U_0$  is the initial rate of dehydration for  $\tau = 0$ , and  $m_g$  is a constant characteristic of a given freezing temperature and a of the dehydration process. The dehydration at any given moment during freezing may be calculated from the expression:

$$J = U_0 / m_g [1 - e^{-m_g \tau}]$$

Experiments have been conducted on the separate cooling of a hind quarter weighing 34.65 kg and of a gluteus muscle weighing 1.297 kg at an air temperature of  $2^{\circ}$ , a relative humidity of 95%, and rate of travel of 0.1 m/sec. It has been found that for the quarter  $m_g = 0.1266$  and for the

Card : 2/4

USSR / Chemical Technology. Chemical Products and Their Application. I-30  
Food Industry.

Abs Jour : Ref Zhur - Khimiya, No 3, 1957, No 10412

Abstract : gluteus muscle mg = 1.2254. Good agreement was observed between the experimentally observed values and calculated values. Check tests on commercial butts showed that the difference between the calculated and measured values was of the order of 2-3%. The authors recommend that three weighings be made when the natural losses in meat cooled under different technical conditions with a central-layer temperature of 30-15° are to be determined. From the two changes in the degree of dehydration,  $g_1$  and  $g_2$ , at times  $\tau_1$  and  $\tau_2$ , where  $\tau_2 = 2\tau_1$ , a system of equations may be set up and the values of mg and  $U_m$  can be calculated; substitution of these values into the basic equation gives the dehydration for any cooling time  $\tau$ . A relationship has been established between the value of mg and the

Card : 3/4

USSR / Chemical Technology. Chemical Products and Their Application. Food Industry. I-30

Abs Jour : Ref Zhur - Khimiya, No 3, 1957, No 10412

Abstract : cooling rate m (RZhKhim, 1956, 41791):

$$mg = 1.36m + 0.0067.$$

The value of  $U_n$  is not constant for different meats and depends on the temperature drop, the shape and physical characteristics of the meat. The effect of the flow rate of air during cooling on the weight loss in the meat has been investigated, as has the dependence of the dehydration during cooling on the storage period, periods of 2-3 days being used.

Card : 4/4

SHAGAN, O.(S.)

GOLOVKIN, N., doktor tekhnicheskikh nauk; SHAGAN, O.; ALYAMOVSKIY, I.

Dependence of meat refrigeration time on air circulation rate. Mias.  
Ind.SSSR 26 no.1:15-19 '55. (MLRA 8:5)

1. Leningradskiy tekhnologicheskiy institut kholodil'noy promyshlen-  
nosti.

(Meat--Preservation) (Refrigeration and refrigerating machine y)

GOLOVKIN, N.; SHAGAN, O.; ALYAMOVSKIY, I.

Variation in natural losses of meat during refrigeration. Mias.  
ind. SSSR. 26 no.6:11-15 '55. (MLRA 9:2)

1.Leningradskiy tekhnologicheskiy institut zhledil'noy promy-  
shennosti.  
(Meat--Preservation)

GOLOVKIN, N.A., doktor tekhnicheskikh nauk; CHIZHOV, G.B., doktor tekhnicheskikh nauk; AREF'YEVA, M.M.; ALYAMOVSKIY, I.G.; SHAGAN, O.S.

Natural losses of meat during long storage. Trudy LTIKHP 10:22-32 '56.  
(MLBA 10:6)

1. Leningradskiy tekhnologicheskiy institut kholodil'noy promyshlennosti.

(Mutton--Storage)

GOLOVKIN, N.A., doktor tekhnicheskikh nauk; SHAGAN, O.S., inzhener; ALYAMOVSKIY, I.G., inzhener.

Effect of the speed of air on the time required for cooling meat.  
Trudy LTIKHP 11:134-140 '56. (MIRA 10:6)

1. Kafedra kholodil'noy tekhnologii.  
(Meat--Preservation)

USSR /Chemical Technology. Chemical Products  
and Their Application

I-32

Food industry

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 33056

Author : Golovkin N. A., Shagan O.S., Alyamovskiy I.G.

Inst : Leningrad Technological Institute of the Refrigeration Industry

Title : Natural Losses on Cooling of Meat

Orig Pub: Tr. Leningr. tekhnol. in-ta kholodil'n. prom-sti,  
1956, 11, 141-148

Abstract: Drying of meat was studied under different conditions of cooling. The computation method that was utilized made it possible to confirm, on the basis of a limited number of weighings, the exper-

Card 1/2

USSR /Chemical Technology. Chemical Products  
and Their Application

I-32

Food industry

Abs Jour: Referat Zhur - Khimiya, No 9, 1957, 33056

imental data on drying secured over the entire period of cooling. As a result of this work a relationship has been found to exist between duration of cooling of the sides, velocity of air flow and haunch-thickness of the sides. The optimal air flow velocity during cooling of sides has been determined. Advantages of a two-stage cooling over a single-stage cooling have been demonstrated.

Card 2/2

GOLOVKIN, N., professor; CHIZHOV, G., professor; AREF'YEVA, M.; ALYAMOVSKIY, I.;  
SHAGAN, O.

Natural losses in frozen mutton in lengthy storage. Khel.tekh.33 no.2:  
25-30 Ap-Je '56. (Meat, Frozen) (MIRA 9:9)

"APPROVED FOR RELEASE: 07/20/2001

CIA-RDP86-00513R001548520012-3

SHAGAN, O. S inzh.

Rovversibility of a process in the thawing of meat. Mias. ind. SSSR  
28 no. 6:46-47 '57. (MIRA 11:1)

(Meat, Frozen)

APPROVED FOR RELEASE: 07/20/2001

CIA-RDP86-00513R001548520012-3"

SHAGAN, O. S.

Golovkin, N. A., Alyamovskiy, I. G., Pershina, Mrs. L. I., and Shagan, O. S. (Leningrad Technological Institute of the Refrigerating Industry): "The Mechanics and Chemistry of Muscular Tissue in the Refrigeration of Meat and Fish" [English - 7 pages]

report presented at the International Inst. of Refrigeration (IIR), Annual Meetings of Commissions 3, 4, and 5, Moscow, 3-6 Sep 1958.

SHAGAN, O.S.

Changes in meat at various stages of cold processing. Izv. vys. ucheb. zav.; pishch. tekhn. no.3:31-37 '58. (MIRA 11:9)

1. Leningradskiy tekhnologicheskiy institut kholodil'noy promyshlennosti, Kafedra obshchey i kholodil'noy tekhnologii.  
(Meat, Frozen)

GOLOVKIN, N., prof.; SHAGAN, O., inzh.

Change in mechanical and chemical properties of muscular tissue  
during refrigeration of meat [with summary in English]. Khol.  
tekhn. 35 no.6:42-44 N-D '58. (MIRA 12:1)

1. Leningradskiy tekhnologicheskiy institut kholodil'noy  
promyshlennosti.

(Meat, Frozen)

Shagan

## PAGE 1 DOCUMENTATION 30V/3727

International Congress of Refrigeration. Moscow, 1955

Serials catalog of 1200 (collected series) reports. Moscow, Gosizdat, 1959. 244 p. Errata slip inserted. 2,000 copies printed.

Ed. (Title page). En. N. Kholodil'stvi Ed. (Inside book); N. V. Chichkov

NOTE: This collection of articles is intended for those interested in the problems of food refrigeration.

**COVERAGE:** The collection contains 26 reports which were submitted at the meetings of the 3rd, 4th, and 5th Committees of the International Congress of Refrigeration. The meeting was held in Moscow, September 3-6, 1956, attended by 265 Soviet specialists and 115 representatives from other countries. The 73 reports published at this meeting cover other fields of refrigeration. These include: the cooling of meat and dried areas; flue-gas tube type refrigerating devices, the use of insulation materials; theory and techniques of rapid cooling and freezing of meat and fish; the performance and cooling systems; and the operation of meat and fish processing plants. A complete account of the proceedings of this meeting was published by the International Institute of Refrigeration in 1959. No personalities are mentioned. References follow several of the articles.

## SOURCES OR CONTENTS:

Chichkov, N. M. Al'goryevskiy, I. Pashkin, and O. Sharapov. Fundamentals of the Technology of Meat Processing. [Moscow] "Gosizdat," 1955  
Kholodil'stvi Ed. (Inside book) (Leningrad Technological Institute, Leningrad)  
Refrigeration Industry. Department of Technological Institutes of the Chemical Chemistry of Muscle Tissue in the Preparation of Meat and Fish

Dobrovolskii, D. A., Dr. A. Mytch-Schubert, Dr. L. Semyonova, and

A. Z. Chichkov. [Induchno-sistolosial'nyi Institut im. M. V. Lomonosova]. Scientific Research Institute for Technological Problems of the Fishing Industry. [The Use of Refrigeration for Preserving Fresh Fish]

Dobrovolskii, N. V. and E. N. Starova. Standard Technological Conditions of the Refrigeration Industry. Antibiotic and Antibiotic Properties of the G. P. Viteznikov Complex

Molotov, D. L. and O. Yu. Pak. [All-Union Scientific Research Institute of the Refrigeration Industry]. Temperature Dependence of the Reproduction and Biochemical Activity of Psychrophilic Bacteria Within the Range of Temperature Required for the Cold Storage of Food Products

Pashkin, A. I. [All-Union Scientific Research Institute of the Refrigeration Industry]. Temperature Dependence of the Properties During Refrigeration

Porter, D. G. [All-Union Scientific Research Institute A.I. Mikoyan]. Generalization of the Results of Experimental Data on the Freezing of Food Products

Bachaturov, A. [All-Union Scientific Research Institute of the Refrigeration Industry]. Effect of the Freezing Process in an Air Stream

Chichkov, N. V. [Leningrad Technological Institute of the Refrigeration Industry]. Generalization in the Criterion Relationship of Experimental Data on the Freezing of Food Products

CONFERENCE NO. 5

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L 29512-65 EWT(m)/EWP(t)/EWP(b) IJF(c) JB

ACCESSION NR: AP5005046

S/0051/65/018/002/0318/0320

AUTHOR: Shaganov, I. I.; Kislovskiy, L. D.; Rudyavskaya, I. G.

TITLE: Free carrier absorption in silicon in the 40-100 micron region

SOURCE: Optika i spektroskopiya, v. 18, no. 2, 1965, 318-320

TOPIC TAGS: silicon, absorption, free carrier absorption, infrared absorption, lattice absorption, free carrier

ABSTRACT: Measurements were made at room temperature of the transmission of n-type Si specimens with a free carrier concentration of  $4 \cdot 10^{14} \text{ cm}^{-3}$  and a resistivity of 15 ohm·cm, and of compensated samples with a resistivity of  $10^4 \text{ ohm} \cdot \text{cm}$  obtained by fast neutron bombardment. The experiments were conducted in the spectral range between 40 and 100 microns on samples 1-10 mm thick. Figure 1 of the Enclosure shows the variations of the coefficient of absorption ( $k$ ) of Si samples with a resistivity of 15 ohm·cm. Curve 2 shows the spectral variation of the coefficient of absorption of free carriers ( $k_f$ ) calculated from the Drude-Zener formula. Curve 3 shows the spectral variation of the coefficient of absorption ( $k_b$ ) of Si specimens bombarded with fast neutrons (compensated samples). Curve 4 shows the spectral variation of the coefficient of absorption by free carriers calculated by the

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ACCESSION NR: AP5005046

formula  $k_p = K - k_b$ . Curve 5 shows the spectral variation of the coefficient of absorption of the crystal lattice calculated from the formula  $k_p = k - k_b$  on the assumption that  $k_b = k_1$  ( $k_1$  being the coefficient of absorption at the long-wavelength wing of the absorption band at 16.4 micron which is associated with the lattice vibrations of samples activated with impurities (and structural defects). The experimental data for free carrier absorption are in reasonable agreement with the absorption figure calculated with the Drude-Zener formula. Orig. art. has: 3 formulas and 1 figure.

[CS]

ASSOCIATION: none

SUBMITTED: 25Jun64

ENCL: 01

SUB CODE: SS

NO REF SOV: 006

OTHER: 009

ATD PRESS: 3187

Card 2/3

L 29512-65

ACCESSION NR: AP5005046

ENCLOSURE: 01

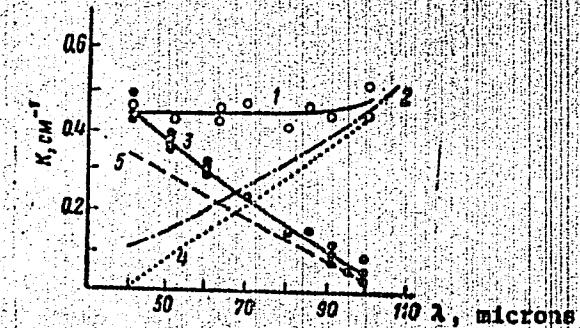


Fig. 1. Spectral variation of the coefficient of absorption of Si.

Card 3/3

PLETSIYEV, D.F., SHAGANOV, I.N.

Immunogenesis and the nonspecific factors of natural resistance.  
Report No. 42 Changes in the content of lysozyme in horse blood  
serum in hyperimmunization. Zhur. mikrobiol., epid. i immun. 42  
no. 10:19-21. O '65. (MIRA 18:11)

I. Institut normal'noy i patologicheskoy fiziologii AMN SSSR  
i Stavropol'skiy institut vaktsin i syvorotok Ministerstva  
zdravookhraneniya SSSR. Submitted June 22, 1964.

SHAGANOV, V.K.

Device for automatic elimination of a gap in the lead-screw-nut pair. Stan. i instr. 35 no.12:7-9 D '64 (MIRPA 18:2)

"APPROVED FOR RELEASE: 07/20/2001

CIA-RDP86-00513R001548520012-3

SHAGANOV, Yu. V.

Automatic and remote control of a gas generator station in  
a shale processing combine. Gaz. prom. 8 no. 7:22-24 '63.

(MIRA 17:8)

APPROVED FOR RELEASE: 07/20/2001

CIA-RDP86-00513R001548520012-3"

SHAGANOVA, K. I.

Automobile Industry and Trade

They build automobiles. Rabotnitsa 30, No. 1, 1952.

Monthly List of Russian Accessions, Library of Congress, March 1952. Unclassified.

SOV/137-58-10-21256

Translation from: Referativnyy zhurnal, Metallurgiya, 1958, Nr 10, p 116 (USSR)

AUTHORS: Shaganova, K. N., Sveshnikov, D. A.

TITLE: Surface Hardening of Crankshafts of Cast Iron With Spheroidal Graphite (Poverkhnostnaya zakalka kolenchatykh valov iz chuguna s sharovidnym grafitem)

PERIODICAL: V sb.: Prom. primeneniye tokov vysokoy chastoty. Riga, 1957, pp 175-183

ABSTRACT: In order to develop a technique of surface hardening of crankshafts of magnesium iron of the following composition (in %): C 3.5 - 3.7, Si 2.5 - 2.8, Mn 0.6 - 0.8, S < 0.01, P < 0.12, Mg 0.03 - 0.06, for the "Volga" automobile, experiments were carried out on the hardening of specimens having the dimensions of the crankpins of the crankshaft (diam. 64 mm, width 40 mm). Heating was done by a single coil detachable inductor-sprayer a 100-kw power generator with a frequency of 2500 cps. To evaluate the effect of the surface hardening of the crankpin bearing area on the fatigue resistance of the shafts, specimens 64 mm in diameter were prepared for fatigue tests. A portion of the specimens was hardened with heating by high-frequency

Card 1/2

SOV/137-58-10-21256

Surface Hardening of Crankshafts of Cast Iron (cont.)

current. The results of comparative tests for fatigue showed that the surface hardening decreases the conventional  $\sigma_w$  from 34.7 to 18 kg/mm<sup>2</sup>, which is explained by the unfavorable distribution of residual stresses within the zone of the endings of the tempered layer in the hollow chamfers of the specimen. The conclusion is made that it is necessary to subject crankshafts to overall heat treatment (normalization with tempering) in order to obtain a granular pearlite structure with an H<sub>B</sub> of 217 ~ 229.

T. F.

1. Crankshafts--Hardening
2. Crankshafts--Mechanical properties
3. Cast iron-magnesium alloys--Properties

Card 2/2

KISELEV, I.I.; BORISOV, N.I.; YASINOVSKIY, B.S., inzh.; SANNIKOV, Yu.K., inzh.;  
SOKOLOV, V.A., inzh.; LEVCHENKO, L.D., inzh.; NALOYEV, G.A., inzh.;  
CHICHAKOV, K.K., inzh.; BARYKIN, V.I., inzh.; FREYDILIN, A.Ya., inzh.;  
GULYAYEV, A.I., inzh.; STIGNEYEV, Ya.F., inzh.; SHAGANOVA, K.E., inzh.;  
KHELIMSKIY, I.Ye., inzh.; AVROV, A.N., inzh.; DEMIDOVA, M.I., inzh.;  
NIKIFOROVA, Ye.D., inzh.; KLIBANOVA, F.I., inzh.; CHIVKUNOV, K.I.,  
inzh.; STOROZHKO, I.G., inzh.; NOVAKOVSKIY, Ye.Ya., inzh.; GOYKTUL',  
A.O., inzh.; TARASOV, A.M., inzh.; SHISHKO, A.P., inzh.; UVAROV,  
P.T., ekonomist; DRAGUNOV, M.V., ekonomist; KARANDASHOV, A.A.,  
ekonomist; KONKIN, M.V., ekonomist; GOREV, M.S., ekonomist. Pri-  
nimali uchastiye: LAPIN, T.I.; RAMENSKIY, Yu.A.; KADINSKIY, B.A.;  
SOKOLOV, S.D.; STOROZHKO, I.G.; POMINYKH, A.I.. POLYAKOVA, N.,  
red.; SMIRNOV, G., tekhn.red.

[Organization and improvement of production; practices of the  
Gorkiy Automobile Plant] Organizatsiya i sovershenstvovanie  
proizvodstva; opyt Gor'kovskogo avtozavoda. Moskva, Gos. izd-vo  
polit. lit-ry, 1958. 332 p. (MIRA 12:2)

1. Direktor Gor'kovskogo avtomobil'nogo zavoda (for Kiselev).
2. Glavnnyy inzhener Gor'kovskogo avtomobil'nogo zavoda (for Borisov).
3. Gor'kovskiy avtomobil'nyy zavod (for all except Kiselev, Borisov,  
Polyakova, Smirnov).

(Gorkiy--Automobile industry)

SHAGANSKIY, R.

Heroes of labor. Za rul. 18 no.10:4-5 0 '60. (MIRA 14:1)

1. Nachal'nik tsekha gornogo transporta Gayskogo gornoobogatitel'nogo kombinata.  
(Gay (Orenburg Province)—Copper mines and mining)

KHOKHRYAKOV, V., kand. tekhn. nauk; SHAGANSKIY, R., inzh.; LEBEDEV, A., inzh.;  
GRICHENKO, I.; FEDIN, L.; TELYATNIKOV, Ya., akkumulyatorshchik

Readers' letters. Avt. transp. 37 no.12:43-44 D '59.  
(MIRA 13:3)

1.Zhigulevskoye passazhirskoye avtokhozyaystvo (for Telyatnikov)  
(Motor vehicles)

KHOKHRYAKOV, V.S., dotsent; FILYARCHUK, S.Ye., inzh.; SHAGANSKIY, R.L.,  
inzh.

Safety regulations in open-pit mine truck haulage. Izv.  
vys.ucheb.zav.; gor.shur. no.7:101-103 '60.  
(MIRA 13:7)

1. Sverdlovskiy gornyy institut imeni V.V.Vakhrusheva (for  
Khokhryakov). 2. Gayskiy mednoserenny kombinat (for Filyarchuk  
and Shaganskiy). Rekomendovana kafedroy otkrytykh rabot  
Sverdlovskogo gornogo institut.

(Strip mining--Safety measures)  
(Mine haulage--Safety measures)

VASIL'YEV, M., kand.tekhn.nauk; SHAGANSKIY, R.

Conditions for maintenance and repair of heavy dump trucks.  
Avt.transp. 38 no.9:20-22 S '60. (MIRA 13:9)  
(Dump trucks--Maintenance and repair)

SHAGAROV, D.G.; KRASNYUK, V.P.; RASKIN, O.M.

Electric heating of the shutoff fittings and drain of batch-type  
bitumen stills. Energ.biol. no.5:30-32 My '56. (MLRA 9:8)  
(Distillation apparatus)  
(Electric heating)

SHAGAROV, I. R.

Cand Med Sci - (diss) "Selection of the treatment method in different forms and stages of obliterating endarteritis." Kazan', 1960. 26 pp; 2 pp of tables; (Ministry of Public Health RSFSR, Kazan' State Med Inst); number of copies not given; price not given; (KL, 7-61 sup, 263)

GRACHEV, I.; SHCHERBENKIN, V.P., starshiy prepodavatel', nauchnyy rukovoditel'.

Maintaining a narrow-gauge railroad in winter and preparing it  
for spring operation. Sber. nauch. rab. stud. Petrozav. gos. un.  
no.6:132-133/162. (MIRA 17:11)

1. kafedra sikkheputnogo transporta lesa Petrozavodskogo  
gospodarstvennogo universiteta.

PISTRAK, M.Ya., inzh. (Moskva); SHAGAS, L.Ya., inzh. (Moskva)

Electric drive of the flying shears in continuous billet mills.

Elektrichestvo no.5:31-38 My '61. (MIRA 14:9)

(Shears (Machine tools)) (Electric driving)

SHAGAIDENKO, A.A.

We are improving the use of land. Zemledelie 27 no.1:22-27  
Ja '65. (MIRA 18:3)

1. Glavnyy agronom sovkhosa imeni Lenina Mordovskogo  
produktivnogo upravleniya, Tambovskoy oblasti.

SHAGAYDENKO, A.A.

Campaign for abundance. Inform.biul.VDNKh no.1:28-29 Ja '65.  
(MIRA 18:3)

1. Glavnnyy agronom sovkhoza imeni Lenina Tambovskoy oblasti.

SHAGAYEV, V.A., inzh.

Production of viscose cellulose in the Czechoslovak Republic.  
Bum. prom. 33 no.3:23-25 Mr '58. (MIRA 11:4)

1. Svetogorskiy tselyulozno-bumazhnny kombinat,  
(Czechoslovakia--Viscose)

SHAGAYEVA, T., kamenshchitsa

Everyone of us should work even better. Sov.profsoiuzy 16 no.11:  
38-39 Je '60. (MIRA 13:6)

1. Karagandinskiy metallurgicheskiy zavod.  
(Karaganda--Construction workers)

SPASSKIY, A.A.; ROYTMAN, V.A.; SHAGAYEVA, V.G.

Helminths of fishes in the basin of the Plotnikova River,  
Kamchatka Province. Trudy Gel'm.lab. 11:270-285 '61.  
(MIRA 15:12)

(Plotnikova River—Worms, Intestinal and parasitic)  
(Parasites—Fishes)

87227

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S/171/60/013/001/002/005

E142/E465

AUTHORS: Vartanyan, S.A., Musakhanyan, G.A., Shagbatyan, Sh.L.  
and Ordyan, M.B.

TITLE: The Synthesis of New Plasticizers Based on  
1,3-Dichloro-2-butene

PERIODICAL: Izvestiya Akademii nauk Armyanskoy SSR, Khimicheskiye  
nauki, 1960, Vol.13, No.1, pp.31-35

TEXT: The dichloro-crotyl ester was prepared by direct synthesis from 1,3-dichloro-2-butene by heating the starting material with the sodium salt of phthalic acid in the presence of a catalyst (pyridine). A mixture of stereoisomers of di- $\gamma$ -chloro-crotyl phthalates is formed (yield = 70%). The crystalline form (m.p. = 43°C) is separated, in its pure form, by crystallizing the same from benzene; the liquid isomer (b.p. = 186 to 188°C at 2 mm,  $n_D^{20}$  = 1.5355) is obtained from the mother liquor by vacuum distillation. Earlier investigations have shown that 1,3-dichloro-2-butene and compounds containing the chlorocrotyl residue, exist in two stereoisomeric forms. Experimental results indicate that the crystalline as well as the liquid isomers can be used as plasticizers instead of the widely utilized dibutyl

Card 1/2

87227

S/171/60/013/001/002/005  
E142/E465

The Synthesis of New Plasticizers Based on 1,3-Dichloro-2-butene

phthalate. Results of tests, carried out on polyvinyl chloride, when using the above described plasticizer, are given in a table. Mixed esters of phthalic acid were also prepared by heating phthalic anhydride with butyl, hexyl, heptyl and octyl alcohol and subsequent addition of  $\gamma$ -chlorocrotyl alcohol and toluene sulphonic acid as catalyst. The freezing points of the individual plasticizers are of especial importance during the preparation of frost-resistant synthetic materials; it should be noted that the synthesized  $\gamma$ -chlorocrotyl ester of salicylic acid has a freezing point of  $-32^{\circ}\text{C}$ . Details of the preparation and analytical data of the composition of the prepared esters are given. There are 2 tables and 3 Soviet references.

ASSOCIATION: Institut organicheskoy khimii AN ArmSSR  
(Institute of Organic Chemistry, AN ArmSSR)

SUBMITTED: August 7, 1959

Card 2/2

VARTANYAN, S.A.; SHAGBATYAN, Sh.L.

C-alkylation by means of  $\beta$ -alkoxyketones. Izv.AN Arm.SSR.Khim.  
nauki 14 no.1:43-49 '61. (MIRA 15:5)

1. Institut organicheskoy khimii AN Armyanskoy SSR.  
(Ketones) (Alkylation)

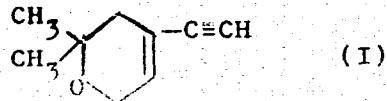
S/171/61/014/006/005/005  
E075/E136

AUTHORS: Vartanyan, S.A., and Shagbatyan, Sh.L.

TITLE: Chemistry of vinylacetylene. Part XXVIII. Synthesis and conversion of vinylacetylenic alcohols with a doubly substituted vinyl group

PERIODICAL: Akademiya nauk Armnayskoy SSR. Izvestiya. Khimicheskiye nauki, v.14, no.6, 1961, 577-584

TEXT: The authors continued their work in the field of vinylacetylene chemistry by making an attempt to prepare vinylacetylenic alcohols in which the vinyl group would be placed in the dihydropyran ring. It was thought that isomerisation of these carbinols would give a new way for the preparation of a whole series of substituted  $\alpha$ ,  $\beta$ -unsaturated ketones, which could be used for the synthesis of new heterocyclic compounds. The starting compound

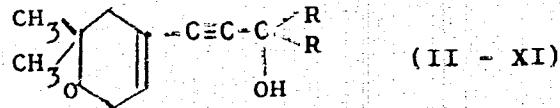


Card 4/3

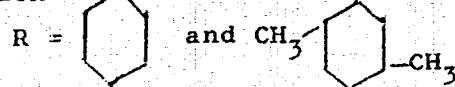
S/171/61/014/006/005/005  
E075/E136

Chemistry of vinylacetylene

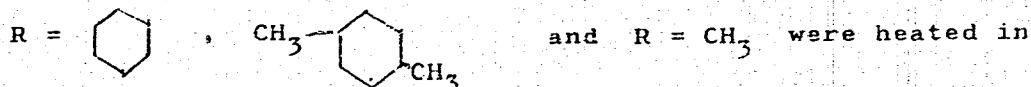
was synthesized by condensing acetylene with 2,2-dimethyltetrahydropyran-4-on. The compound (I) reacted readily with ketones in the presence of powdered KOH without a solvent and gave carbinols of general formula



Hydrogenation of the carbinols in which



in ethyl alcohol solution in the presence of Pt catalyst gave the corresponding unsaturated alcohols when the carbinols with

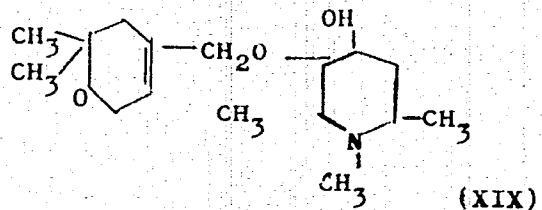


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Chemistry of vinylacetylene

S/171/61/014/006/005/005  
E075/E136

CH<sub>3</sub>OH solution in the presence of acidic mercuric sulphide. The resulting compounds were the expected unsaturated ketones. Hydration of carbinol IX in the solution of 10% H<sub>2</sub>SO<sub>4</sub> in the presence of acidic mercuric sulphide gave compound XIX:



Heating of the unsaturated ketones with NH<sub>4</sub>OH gave 4-piperidones containing the tetrahydropyran ring. There is 1 table.

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VARTANYAN, S.A.; SHAGBATYAN, Sh.L.

Chemistry of vinylacetylene. Part 46: Synthesis and transformations  
of new vinylacetylenic alcohols with a dihydropyran ring. Izv.AN  
Arm.SSR.Khim.nauki 17 no.1:95-102 '64. (MIRA 17:4)

1. Institut organicheskoy khimii Armyanskoy SSR.

DEMENT'YEV, G.P. (Moskva); SHAGDARSUREN, A. (Ulan-Bator)

Mongolian saker and the taxonomic position of the Altai gyr falcon.  
Sbor. trud. Zool. muz. MGU. 9:3-37 '65.

(MIRA 18:6)

"APPROVED FOR RELEASE: 07/20/2001

CIA-RDP86-00513R001548520012-3

SHAGDASUREN O.

Ecology of the red-footed falcon *Falco vespertinus amurensis* Radde  
in the Mongolian People's Republic. Ornithologia no. 7:350-352 '65.  
(MIRA 18:10)

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CIA-RDP86-00513R001548520012-3"

BY CHAPMAN, O.

Griffon vulture *Gyps fulvus malayensis* Hume in the Mongolian  
People's Republic. Ornithologiae no. 6:485 '63.

(MERA 17:6)

SHAGDARSUREN, T.

Problem of echinococcosis of the lungs. Eksp.khir. 4 no.3:  
24-29 My-Je '59. (MIRA 12:8)

1. Iz kafedry obshchey khirurgii (zav. - kand.med.nauk T.  
Shagdarsuren) Mongol'skogo gosudarstvennogo universiteta imeni  
Choybalsana.

(LUNG DISEASES, diag.  
echinococcosis (Rus))  
(ECHINOCOCCOSIS, diag.  
lungs (Rus))

SHAGDYROV, G., ekonomist

Transporting livestock with airplanes. Grazhd. av. 21 no.  
12:27 D '64. (MIRA 18:12)

SHAGEYEV, M.N.

Evening on the history of the development of rockets. Fig.  
v shkole 21 no.6:75-76 N-D '61. (MIRA 14:12)  
(Rockets(Aeronautics))

SOV/94-58-11-10/28

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TITLE: The Production of Accurate Castings by the Lost Wax Process with Patterns Made of Composition MAI-KTM-500. (Proizvodstvo tochnogo lit'ya po vyplavlyayemym modelyam na sukhom anpolnitele s primeneniem splava MAI-KTM-500)

PERIODICAL: Promyshlennaya Energetika, 1958, Nr 11, pp 19-21 (USSR)

ABSTRACT: This article is about a suggestion that was awarded second premium in an All-Union pwer economy competition. The staff of the works together with the Chair of Metal Technology of the Moscow Aviation Institute developed and introduced that process of accurate casting by the lost wax process using a dry filler for the pattern, composition MAI-KTM-500

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SOV/94-58-11-10/28

The Production of Accurate Castings by the Lost Wax Process with Patterns  
Made of composition MAI-KTM-500.

instead of the old wet filler. The composition previously used for making patterns is given, the new composition consists of 84.5% rosin, 11.8% paraffin wax, 1.0% ceresine, 0.4% bitumen. A variety of different parts that have been produced by this method are illustrated in Figs. 1,2 and 3. A wider range could be made than previously because the ceramic covers of the moulds are much stronger than before. The new composition can be used repeatedly. The advantages of the new composition over materials of lower and higher melting points are briefly stated. When the composition is melted out of the mould little damage is done because its coefficient of expansion is small. Indeed, the moulds are even strengthened because the composition penetrates into the pores of the ceramic. Especially good results were obtained with the new material in the manufacture of turbine blades as shown in Fig. 4. As a result of introducing the new method of accurate casting, the annual economy of electric power is more than 2.4 million kWh and working conditions have been improved. There are 4 figures.

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